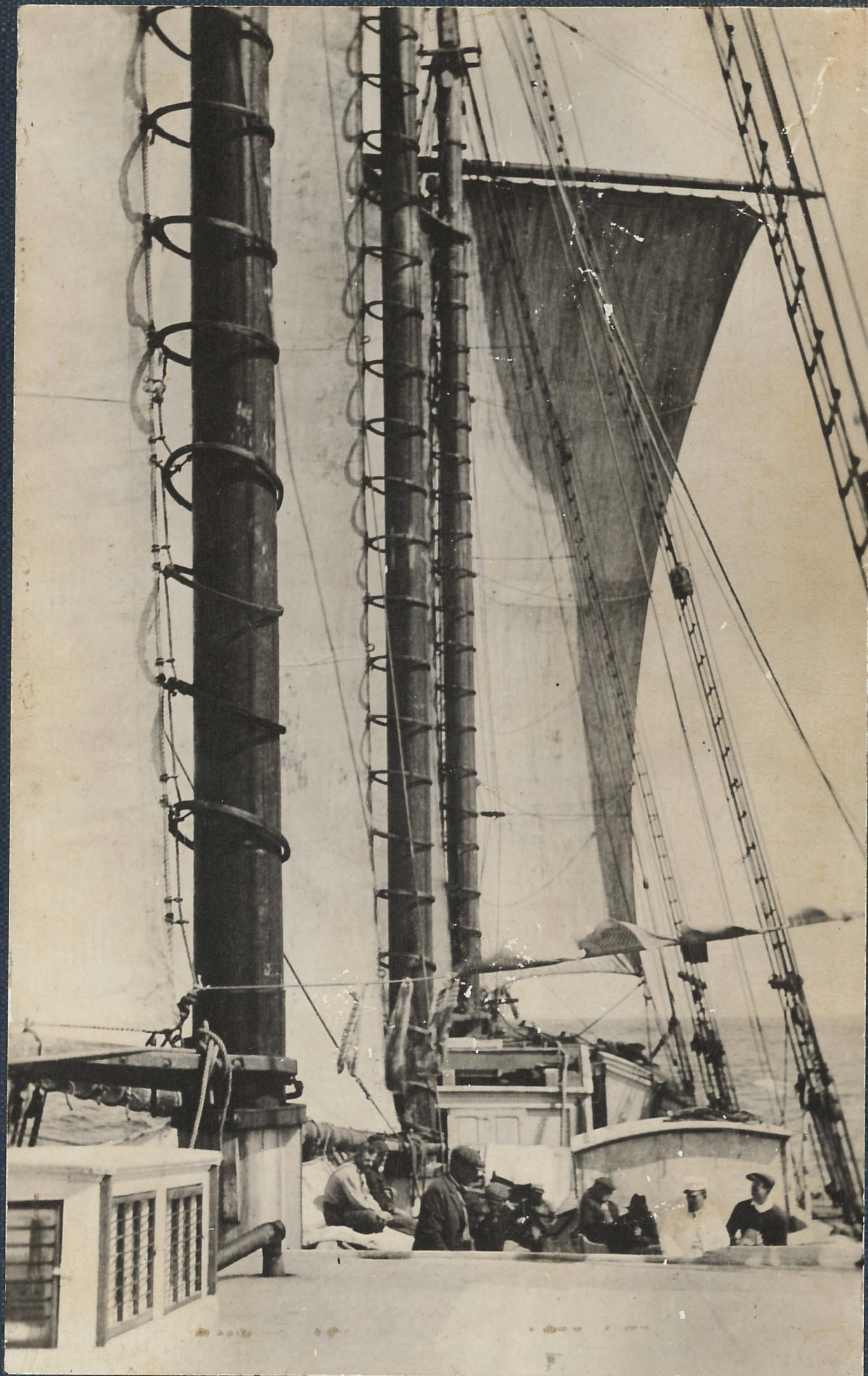
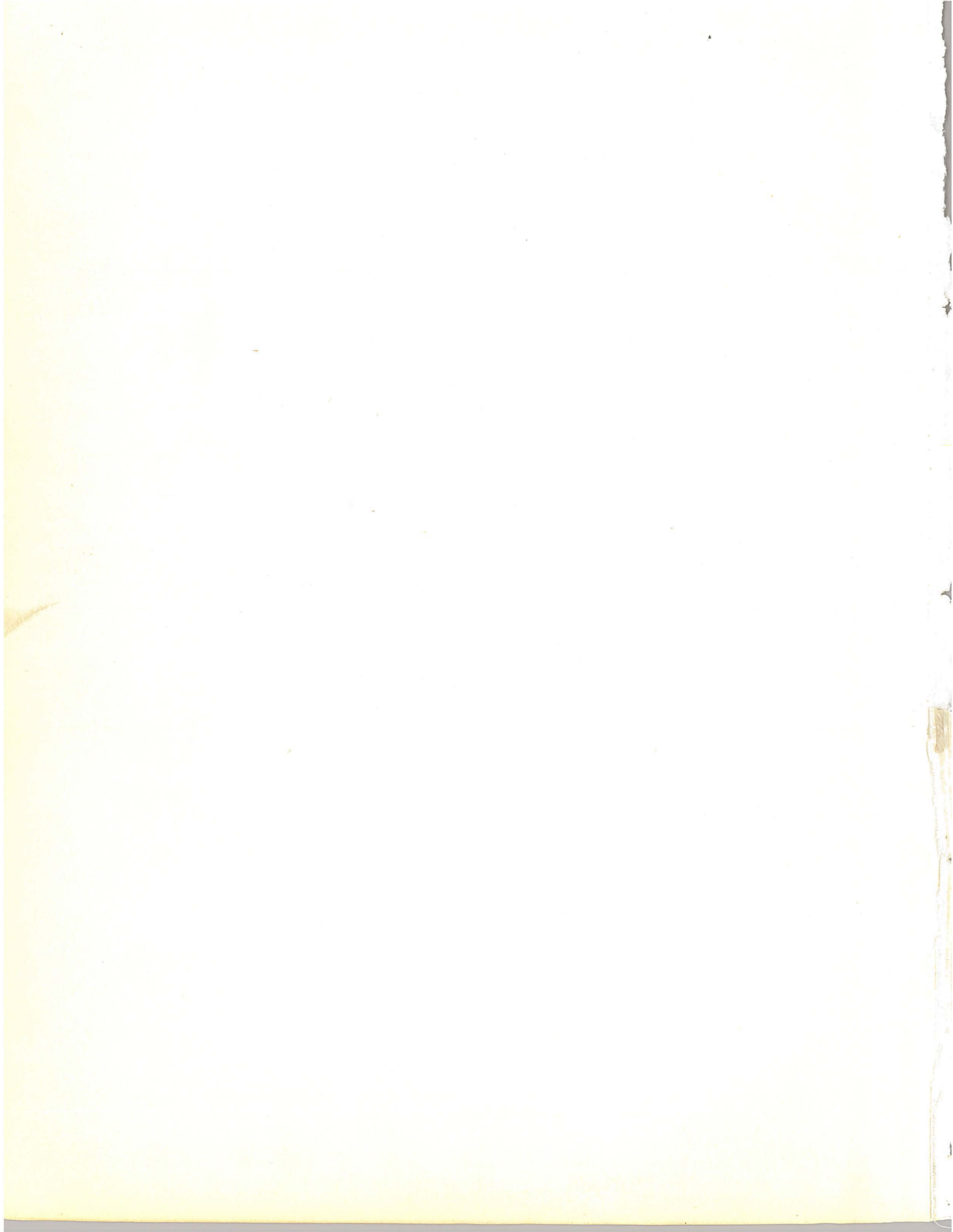






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THE SCHOONER C. A. THAYER

Reports I - III to the State of California

Division of Beaches and Parks,
on the History and Restoration of the
C. A. THAYER.

by the

San Francisco Maritime Museum

San Francisco

March, 1959

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THE C. A. THAYER

Maiden Voyage to Alaska

The C. A. THAYER inaugurated her career as an Alaska salmon packet on April 28, 1912, when Peter Nelson towed her out the Golden Gate behind the launch RUDOLPH N.

Her deck is piled high with lumber and boats, and a large scow projects over the bulwarks; the hold is filled with barrels, salt, and other supplies for the saltery.

The THAYER departed in a grand flurry of doggerel, a portion of which has been preserved to a grateful posterity:

"To the THAYER we bid adieu,
To Mrs. Nelson and the crew.
To the Golden Gate, then through,
Out to sea our parting view

"Three cheers then to the THAYER!
And to her our tribute pay her,
And never a day shall be gayer
As on this sailing day of the THAYER. "

Schooner C. D. Tayer
going to Elkhart
towed by Rudy N. note
the heavy lead



FOREWORD

This Report by the San Francisco Maritime Museum to the State of California, Division of Beaches and Parks, is the first in a series designed to present a coherent plan for the successive phases in the restoration and preparation for display of the three-masted schooner C. A. THAYER and the steam schooner WAPAMA, as well as the history of these vessels within its proper setting.

This, and subsequent, Reports will be divided between two quite different types of material, which call, in some respects, for different forms of presentation. That material dealing with the restoration project itself is in large part topical, and as the pace of the project speeds up will not, in many cases, wait upon the completion of a full-scale Report before it is either needed or becomes out of date. For this reason photographic reproduction from a master copy has been hit upon as the method of multiplying copies of the Reports, as this technique will permit submission of important and timely sections before the completion of the whole Report, when desirable. (The "Mooring" section of this Report, for example, was informally submitted in January.)

The historical section of these Reports will prove of less immediate interest but will be of permanent value. Again, the means of reproduction should prove advantageous in permitting a later compilation of the material in a different order, incorporating amendments. The historical material is also divided into major categories: that which is

"research" work in the usual sense; and that which is original source material of immediate importance because of its perishability -- the recollections of the men connected with these vessels and their history.

The most pertinent photographs illustrating the history of the THAYER and the WAPAMA will be presented in these Reports as will appropriate plans, drawings, and tables.

Finally, it should be borne in mind that neither this nor the subsequent Reports are complete in themselves, but are a part of a whole which will be rounded out in the full set. That portion dealing with the restoration program will eventually provide not only a history of the project but a record of use in future maintenance and in work on other ships; the permanent value of the historical sections will become clearly apparent when the project reaches the display phase, and should provide a convenient source of reference so long as the San Francisco Maritime State Historical Monument exists.

PART I

THE RESTORATION
OF THE C. A. THAYER

Intrinsic Qualities

Interpretation

Restoration Program

Personnel

Mooring Facilities

THE RESTORATION OF THE C. A. THAYER

INTRINSIC QUALITIES OF THE C. A. THAYER

At the outset it should be stated that the C. A. THAYER requires a quite different handling than that given her predecessor museum ship on the San Francisco waterfront -- the steel, full-rigger BALCLUTHA. The THAYER, despite her smaller size, simple masts and rigging, and largely plain and undecorated hull, has one all-pervading quality that the BALCLUTHA has only in part. This is the fact that she is made of wood. Wood is the traditional shipbuilding material of three milleniums; it is inextricably associated with sailing ships in the public mind, and at every turn offers a shape and texture that can never be attained by steel, the basic material of BALCLUTHA's construction.

The second striking difference between the two vessels is that the C. A. THAYER is a hundred feet shorter. This again gives her a different quality as a display ship in that, once aboard, the public's interest is more easily sustained by the "intimacy" of her plan -- sweeping vistas of essentially uninteresting painted steel are absent. The result of the shortened perspectives and the material of which she is made is that the C. A. THAYER has an intrinsic "exhibit" quality about her in even her present state. For that reason exhibits aboard to sustain the interest of the visiting public need not be so extensive as those on BALCLUTHA.

Perhaps the best way to analyze the worth of the C. A. THAYER as an historical object in the ownership of the State of California is to project the vessel some years into the future when a new generation has arrived upon the scene and the uniqueness of the last surviving coastal lumber schooner is even more apparent than it is now. What are the qualities that will then strike the eye and imagination of the interested person encountering this little ship tied up at her mooring?

Vessel's age —
Feeling of Survival

The first impression that she will give, and her chief value, will be that she is old. The THAYER will have the feel of a survivor from some long-vanished era. Her anachronistic hull form, masts and rigging, and the inevitable tell-tale traces of age in topside planking and houses will imply antiquity, no matter how well she may be kept. Age -- that special quality that goes with being the lone survivor -- will be chief among her values.

A Floating Exhibit . . .

Her second value to the new viewer of the future will be that she is afloat. The importance of her condition afloat in her native element goes far beyond the realistic roll of her decks beneath the feet of the visitor once he is aboard, important though that be. Her reality as a ship, (not as a building, not as a stagecoach, not as a site where important events once took place) is inextricably bound up with her floating condition.

In a world that will be increasingly synthetic and uniform, this quality of being a real ship is as important to the C. A. THAYER as is her age. A ship from the past suspends in two elements -- time and water, and to take away the second would be to diminish the impact of the first.

These remarks are addressed as refutation to the school of thought that feels an old ship should be preserved in some sort of a cradle or up on pilings, or upon a concrete block, or drawn up on shore. The various ways and means of installing such a large wooden vessel ashore are, in their turn, prohibitively expensive, unsightly, spurious, dangerous, or conducive to future expenses -- or offer these defects in some dismaying combination.

1. The only shoreside setting which has much to recommend it is a graving dock, into which the vessel can be floated, displayed dry (with only air surrounding the hull), and refloated, if necessary, for major repairs to the dock or shipyard work on the vessel, but the cost of such an installation is staggering.
2. A replica of an early day shipyard in which the vessels could be drawn up on ways (and returned to the water if necessary) would provide a legitimate setting, but an unattractive one, for large vessels of the size of C. A. THAYER and WAPAMA as the deck would be at the level of the roof of a two-story house. Nor would such an installation be remarkably inexpensive, for a large wooden vessel, though gently and perfectly supported

at every point when in its natural element, will not long stand the strain of lying upon an uneven surface, but must be adequately supported by a stout foundation. Smaller vessels do not present these display or structural problems.

3. Popular fancy imagines placing a vessel in some sort of "nest" (preferably a block of concrete) as a cheap means of permanent preservation which eliminates bottom maintenance. But for a wooden vessel such a bed can only be a grave -- it is all too permanent and not at all preservative. The net return on a technique which was spurious to begin with would be only a rapidly-rotting hull immobilized beyond reach of shipyard help.
4. Placing the THAYER upon some framework of piling, or in some sort of cradle, which leaves the hull partially immersed in the water, recalls nearly all of the objections raised to the techniques above, and poses its own unique drawback as well: a hull rigidly supported at a number of points must eventually suffer destruction or severe damage by the buffetting of the waves at high tide during an unusually severe winter storm.

From a display standpoint, a vessel exhibited ashore compares with one afloat as a stuffed animal in an academy with a live animal in a zoo.

Wooden Construction . . .

The quality of age that will be conveyed at first glance by the archaic shape of the hull will be sustained as the visitor draws nearer by another very special quality the ship will have almost entirely to herself in years to come -- the antiquity implicit in a sizable vessel being built of wood. We have still not put the age of wooden vessels far enough behind us that the startling fact of a craft so constructed and so surviving has attained its real impact. Wooden ferryboats, riverboats, and similar craft were common enough in the 1920's and 1930's that a vessel of wooden construction has not yet quite reached any special significance for a good number of persons of the older generation. Moreover, World War II produced a revival of wooden shipbuilding, the product of which was carried over into the early 1950's. However, we are now striding away from these last remnants of wooden shipbuilding at a rate that insures a unique status where the C. A. THAYER and WAPAMA, in particular, are concerned.

The builders of wooden pleasure craft, for the most part, make a point of concealing the material with sleek and high gloss modern finishes. The deck structures take their character from automobile styling rather than from the older, angular, wooden construction. These two holdouts of wooden construction -- commercial fishing craft and pleasure boats -- seldom reach seventy five feet in length, and for the most part average far less than this, so already the C. A. THAYER (with a hull length exceeding 165 feet) is well on her way to being a curiosity simply because

of the material used to build her.

An old ship of this sort, no matter how well painted, never achieves a glossy surface, and the feel of the material in her suffuses the vessel from every aspect. The seams stand out and reveal how the schooner was joined together, and here another anachronism becomes apparent: The technique of modern shipbuilding is one of masses. To save labor costs, the largest practicable sections are joined together -- usually sizable steel plates, their edges joined by welding and a smooth coat of paint spread over the whole. The THAYER, on the other hand, tells a different story altogether. Here are countless fragments -- the planks and timbers -- gathered together by skillful hands to make a ship. Immediately she speaks of hand labor, vanished skills, and a less surcharged economic and social order that is really more akin to shipbuilding in the days of Columbus than it is to the great steel ships that are commonplace today.

A Sailing Ship . . .

In an appraisal of the C. A. THAYER's visual and imagination-stirring qualities as they assail the viewer, the fact that this vessel is propelled by sail will be intermingled with these first strong impressions of age, wooden construction and survival afloat. The three tall masts and the bowsprit convey "sailing ship" to even the lay visitor, and here again the passage of time will add a further dimension of interest in the size of these massive wooden spars. But as a visitor approaches the vessel a secondary pattern

spelling "sailing ship" will catch his attention: The motif of gaff and boom, shrouds and backstays, and throat and peak halliards, repeated at each of the three masts. There is a stimulation in this detail that rivals the impressiveness of the tall masts as seen from a distance -- these wires and chains and blocks and deadeyes are the stuff of the illustrations of the sea novels of boyhood; they are the background in many a sea movie (but this time real) or they are the full scale prototypes from which miniatures are found in a myriad fleet of small, familiar pleasure craft.

In one way or another the gear that makes the C. A. THAYER a sailing ship has a strong feeling of heritage, and this is one of the vessel's most important qualities.

INTERPRETATION OF THE C. A. THAYER

As remarked above, here is a vessel a hundred feet shorter than San Francisco's other sailing ship/museum ship, and because she is a vessel on a more intimate scale and built of a warmer and more interesting material, the approach to her interpretation should be far different to that used aboard the BALCLUTHA.

Contrast With BALCLUTHA

The BALCLUTHA -- with her capacity for 2,600 tons of cargo in an efficient but essentially cold interior -- required the collecting of contemporary exhibits and the filling of space with large descriptive panels to lessen her "empty" look. Fortunately, the C. A. THAYER, in an empty state, conveys none of the feeling of being an empty shell. There is the feeling of "thickness" and massiveness in texture at every hand, and so there is less need for the importation of exhibits to lend interest to the vessel.

Exhibit Policies

Five modifications of a "bare boat" display policy, however, present themselves for consideration as the THAYER is readied for presentation to the public:

InterpretationOf Type

1. Unlike the BALCLUTHA at her present berth, the THAYER will be competing with two other vessels, a ferryboat and a steam schooner, as a museum ship. There is a limit to the number of bare, empty, wooden craft that a lay visitor can clamber aboard, wander through and then leave, without a flagging of interest. Some characteristic exhibits to heighten the interest of (and difference between) each vessel, seems indicated.

Three Phases In
Vessel's Career

2. The C. A. THAYER has gone through three separate phases of her career -- as a lumber carrier, as a salmon saltery tender in Bristol Bay, and as a Bering Sea codfishing schooner. Considerable gear from this final phase of her career is still to be found on board and should be intelligently displayed in some section of the vessel. The danger here is that an imbalance will result; that unless some of the accoutrements of a lumber schooner trading to Mexico and the Fiji Islands are collected, that the earliest and most important phase of the C. A. THAYER's career will be overshadowed by the large amount of codfishing material on hand to put before the public.

Museum For
Schooner Relics

3. As the last of 123 West Coast three masted schooners, the THAYER becomes to some degree a logical candidate for use as a museum to honor her type. The vestiges that survive from this vast fleet are not many, and the THAYER as a repository for these relics would speak not just as one vessel but for all. There is no question but that fascinating displays could be worked up around this material.

The Human
Element

4. A multitude has walked the decks of the C. A. THAYER during her long life of sixty four years. First a Danish shipbuilder, then Swedish and Norwegian captains, their wives and daughters, Fijian and Australian stevedores, codfishermen from Nova Scotia and the Baltic, and many more whose relationship to the vessel will be developed by further research have lived forward or aft or done their work aboard.

One of the virtues of the variegated career of this particular three-master is the rich assortment of people whose lives she has in one way or another affected. It is important to invest the schooner with

the memories of these people -- in that way she comes alive. A technique has to be worked out by which their photographs (to the extent that they can be located and reproduced) are found again in the cabins and fo'c'sles that people once occupied.

5. Very few members of the present-day public have the slightest knowledge of ships and the ways of the sea -- and we may expect the future public to exhibit greater ignorance. Experience with visitors to BALCLUTHA shows us that questions will range from gems of even greater brilliance than: "Do you use machines to rock the ship?" to those reflecting the interest of ordinarily well-informed persons who want to know what materials the vessel is constructed of and what various parts of the ship or its rigging are for.

The public has a legitimate right to adequate description of the nature of the vessel and its operation.

What It Is

All About . . .

One Ship -- One Exhibit . . .

Superficially, it might appear that the displays suggested above imply a "museum ship," in the sense that the BALCLUTHA is a museum ship. Yet, as stated at the outset, the C. A. THAYER demands a quite different treatment, and it is our belief that the schooner should not be cluttered in any way that would spoil the "working ship" vistas that will appear to the visitor.

The solution to the problem of providing adequate interpretation without unduly cluttering the ship lies in careful combination of the types of display outlined. Explanation of the ship itself is the most important single display element, and this may be done with reference to the people who inhabited her and her particular history, and in some cases with relics of other schooners.

Such techniques are not only desirable in that they bring life into what must otherwise be -- too often -- bald "labeling," but also make it possible to enlighten the ignorant without insulting the intelligence of the well-informed. Such a policy will call for much "tighter" organization than that necessary to the BALCLUTHA, and as a result, adequate interpretive display will prove more, rather than less, difficult: The impact of the C. A. THAYER should be that of a single, highly-coherent exhibit.

RESTORATION PROGRAM FOR THE C. A. THAYER

Background -- 1895 - 1957

When the three-masted schooner C. A. THAYER made her last voyage to the codfishing banks of the Bering Sea in 1950 an era in Pacific Coast Maritime history came to a close. That commercial sail appeared in Pacific Coast waters as late as the mid-twentieth century was a tribute to the canny business head of Captain J. E. Shields, who for thirty years operated West Coast built schooners in the Alaska fisheries.

The C. A. THAYER was built by the famous Humboldt Bay ship-builder Hans Bendixsen in 1895 for the E. K. Wood Lumber Company. A three-masted, bald-headed schooner of 453 tons, she was representative of the medium-sized schooners popular in the West Coast lumber trade. Until 1912 she hauled lumber from the E. K. Wood mills at Grays Harbor and Bellingham to California or the Hawaiian Islands. Purchased by Peter M. Nelson, she entered the Alaska salt-salmon trade in 1912, and made annual voyages to Bristol Bay until 1924, when she was purchased by Captain Shields for his Pacific Coast Codfish Company. Her home port changed from San Francisco to Seattle, but for six seasons she continued to voyage to the Bering Sea each year. During the decade 1931 - 1941 the aging schooner was laid up in Lake Union, a victim of the Depression.

The U. S. Army bought the THAYER in 1942 and cut her down into a barge, spending fifty thousand dollars in stripping her down and repairing some of the ravages of time. At the end of the War Captain Shields purchased the THAYER back from the Army, together with the SOPHIE CHRISTENSON, another former Shields schooner. Captain Shields' cod-fishing fleet was in a sorry condition in 1945; the CHARLES R. WILSON, which he had operated during part of the war years was rotten; the SOPHIE CHRISTENSON rigged, but in very poor shape; and the C. A. THAYER, while fairly sound, was an un-rigged barge. Shields solved his problem by removing the bowsprit and three of the SOPHIE CHRISTENSON's masts and stepping them in the THAYER.

The renovation, while unsightly, was good enough to keep the C. A. THAYER in operation for another five years. The decline of the salt codfish market led to the THAYER's retirement in August, 1950, and for four years she lay idle, with the CHARLES R. WILSON, at the Pacific Coast Codfish Company's dock at Poulsbo.

The C. A. THAYER was again rescued from oblivion when Captain Charles McNeal purchased her for a "museum ship" and moored her on the beach at his property on Hood Canal. The Pirate Ship BLACK SHIELD lay rotting -- but making money -- for two seasons, until rescued from this degrading condition by the State of California.

Good luck and the repairs effected by the U. S. Army and by J. E. Shields had preserved the THAYER in comparatively good condition, but much work remained to be done to fit the vessel for the voyage to San

Francisco, even if it were to be at the end of a tow line.

The refitting of the C. A. THAYER at Puget Sound, under the direction of Harold Huycke, with the assistance of Captain A. F. Raynaud, represented the first stage in the restoration of the schooner.

Restoration Work Accomplished, March 1957 - Sept. 1957

The Seattle program was designed to place the vessel in seaworthy condition for a comparatively short summer or fall voyage, but at the same time future maintenance and display problems were carefully considered. The work, once underway, led to further restoration, for long-term economy frequently dictated carrying out more extensive repairs than those originally contemplated. During the spring and summer of 1957, the forecastle head and stern were extensively rebuilt and the masts and bowsprit were replaced and rerigged. Thus, the C. A. THAYER, when she sailed from Seattle, had been in many respects restored to her original appearance, and was in remarkably sound condition for a vessel of her age.

Following is a synopsis of the repairs effected in Seattle between March and September, 1957:

A. By the Lake Union Drydock Company:

Forecastle Head

Bull rails and rotted portions of covering boards renewed.
 Cat heads and pawl bitt renewed.
 Beam at the break of the forecastle head and sister beam forward of the pawl bitt renewed.
 Decking in the way of the pawl bitt renewed.

Hull

Forecastle sheer strake, port side, replaced for 11'.
 Number 16 plank from garboard replaced for 50' between fore and main rigging, starboard side.
 Additional 33' of planking replaced on starboard side.
 Approximately 3,600' of seams recaulked.
 Topsides sandwashed and painted; bottom painted.
 Keel repaired from the forefoot to a length of 30'.

Machinery, etc.

Anchor windlass support timbers renewed.
 Anchor windlass and gas donkey engine put in running order.
 Anchor chains cleaned and sprayed with asphalt, pins, shackles, and links for anchors renewed or repaired.

B. By Maritime Shipyards:

All Work to the Stern

Horseshoe timbers, port and starboard, and across stern, replaced, together with knees;
 Installed one new and three sister frames at port and starboard quarters, six new and four sister frames in transom.
 Installed sister beam for main poop beam; removed one deck beam, cut off deteriorated ends of others and installed angle supports.
 Replaced 119' of planking, transom.
 Replaced 136-1/2' of planking, starboard quarter.
 Replaced 66' of planking, port quarter.
 Replaced 464' of decking aft.
 Installed new bitts, starboard quarter.
 Replaced 54' of covering board around stern.
 Replaced 54' of bull rail, 60' of turned stanchion rail, and 55' of rail cap around stern.

C. By Commercial Ship Repair Company:

Rigging

Stepped and rigged new bowsprit and three new masts,
using existing ironwork and rigging wherever possible.
Replaced fore gaff and boom.

In addition to the major items outlined above, many small jobs were accomplished in the line of "ship's housekeeping" and in fitting the vessel for sea, ranging from setting the galley stove in order to painting the houses, coamings, bulwarks, etc., and when the ship arrived at San Francisco in October, 1957, she was in quite presentable condition.

Restoration Work Accomplished, November 1957 - January 1959

Between November, 1957, and August, 1958, no more than routine housekeeping work was done aboard the C. A. THAYER: the vessel was kept clean and the pump in running condition. During this period the ship was attended by two watchmen, and no additional work-force was available.

As it was necessary to dry-dock the schooner for bottom painting sometime during the summer of 1958, the possibility of protecting the bottom from the action of marine borers by means of sheathing was investigated. Unfortunately, shipyard bids on complete redwood sheathing (laid over Irish felt) of the bottom proved so much higher than original estimates that it was

necessary to abandon the project until larger funds were available, and the economy of the procedure could be examined at greater length.

The THAYER was docked at the Moore Dry Dock Company at the end of August, and the following work was done:

1. All worm holes were burned and plugged, and two coats of copper paint applied to the bottom.
2. Large gasoline and water tanks installed in the hold during the THAYER's codfishing career were removed.

When the C. A. THAYER came out of dry-dock a more ambitious maintenance program was contemplated, but the arrival of the steam schooner WAPAMA at San Francisco soon cut the expanded work-force back to three men. However, since the beginning of September the following work has been accomplished:

1. The turnbuckles have been sand-blasted, lubricated, and red-leaded.
2. Much of the standing rigging has been lubricated, and most of the serving tarred.
3. The steering wheel and some of the other iron-work has been chipped and red-leaded.
4. Some of the excess tar around the seams on the main deck has been chipped off.
5. Some of the old paint has been scraped off the cabin woodwork.

Beyond this, the ship's housekeeping has been kept up, and many of the minor details which consume so much of any crew's time have been attended to. However, it may be seen that the major work has languished; only the slushing of the rigging has been in that category which must be considered "priority."

DRYDOCKING PLANS OF THE C. A. THAYER

1. Keel profile for the C. A. THAYER, showing her "hog" (re-drawn from Moore Dry Dock Co. profile).

Note: The 4-1/2" height of the fifth station from the bow is apparently in error, and should be 3-1/2".

2. Blocking plan, showing position of keel and bilge blocks.

VERTICAL SCALE 3" = 1 FOOT.

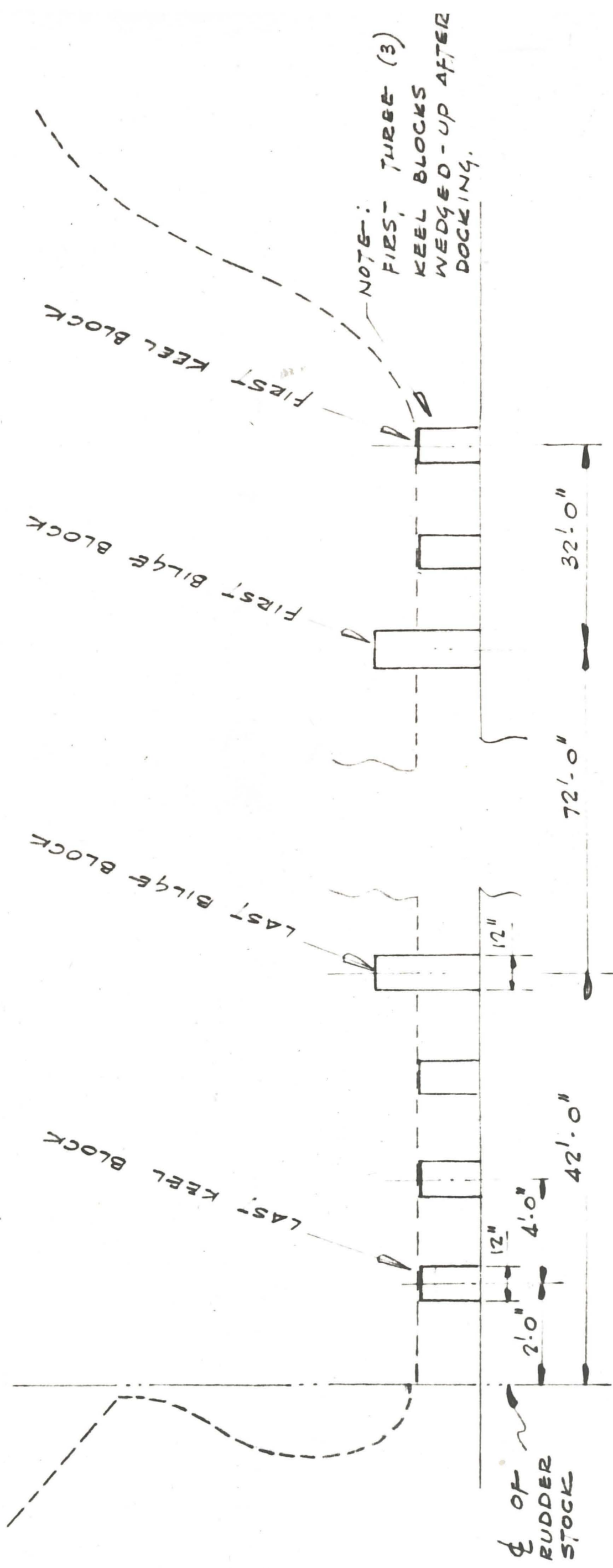
MOORE DRY DOCK COMPANY

OAKLAND, CALIFORNIA

POSITION OF VESSEL ON DOCK

BILGE BLOCKS SPACED 12' CTRS.
KEEL BLOCKS SPACED 4' CTRS.

NAME: SCHOONER "C. A. THAYER."
DATE: AUGUST 26 1958
DOCK: NO 3



It is not through negligence on the part of the crew that so little has been accomplished. All of the major work has been of the sort that can be accomplished with little in the way of tools and/or materials; and a good portion of the tools and materials have been supplied from the ship BALCLUTHA. In short, an inexperienced crew has done about the best that could be expected with almost no financial support.

The Future Program, February - April, 1959

The most important single element lacking in the maintenance and restoration program for the C. A. THAYER during the period from September, 1958, through January, 1959, has been the skills and supervisory talents of a full-time, experienced, and capable Ship Manager. That the detailed, but quite simple and inexpensive, program submitted by the Maritime Museum on September 22nd and October 1st, 1958, has progressed so little shows clearly that day-to-day work cannot be accomplished by advice alone.

The lack of tools, supplies, and workmen could not have prevented an experienced man from doing much more than has been done, and it is the opinion of the Maritime Museum that little will be done until a capable Maintenance and Restoration Foreman is hired. It would appear that it will be possible to employ such a man in February. He will be faced with the restoration and maintenance of the WAPAMA as well as the C. A. THAYER, and he will at once have to pick up the threads of a lagging

maintenance program while he prepares to manage a rapidly expanding restoration program.

One of his most immediate concerns will be that of utilizing the presently available work force aboard the C. A. THAYER. Following is the work program which has been pending since the end of September:

1. The leaking cabin top must be sanded, the seams reefed out, caulked, and payed, and the decking oiled. This job, which calls for expert (contract) work in the case of the reefing and caulking, has been delayed too long, and cannot be attempted until warmer weather appears.

The two jobs below, while they do not require skilled personnel, have also been delayed too long, and must wait on good weather:

2. Clean main deck with sand and caustic soda and apply pine tar oil.
3. Scrape masts, bowsprit, and spare boom and apply raw linseed oil.

The following jobs, which can also be handled by available personnel, can proceed immediately:

4. Cap upturned ends of standing rigging to keep water out of cores.
5. Chip, red-lead, and paint, as necessary, all ironwork.
6. Free bilge pump seacocks.
7. Take up flooring in coal locker, scale and red-lead fastenings, and cut holes in non-structural bulkheads to insure better fore-and-aft ventilation.
8. Remove linoleum from cabin floor and clean deck.

9. Paint (time and place depending upon the weather).
 Nearly the whole vessel is overdue for painting,
 and the topsides are in particularly poor condition.

The following tools and supplies, few of which are on hand at present, are necessary to carry this minimum program forward:

- 6 wooden scrapers - Big Hand #1
- 2 fine scraper files
- 1 claw hammer
- 1 pair heavy duty pliers
- 1 pair heavy duty side cutters
- 1 Dreads reefing iron, 12" x 1/4"
- 1 Dreads reefing iron, 12" x 3/16"
- 1 Stortz spike iron, 9"
- 2 Dreads regular caulking irons, #0
- 1 Dreads regular caulking iron, #1
- 1 Dreads bent caulking iron, 1/16"
- 1 Dreads hawsing iron, 1/4"
- 1 Dreads hawsing iron, 5/16"
- 1 hawsing beetle
- 1 sharp iron, 9" x 1-1/2"
- 1 marline spike, 10"
- 2 heavy duty wire brushes
- 2 seam brushes, 5"
- 2 chipping hammers
- 1 steel carpenters square
- 1 fid, 9"
- 2 hack saw frames, heavy duty
- 12 hack saw blades, 18 tooth
- 12 hack saw blades, 32 tooth
- 6 assorted screw drivers
- 3 #1 beeswax
- 1 sleeve (50 sheets) coarse sandpaper
- 1 sleeve (50 sheets) medium sandpaper
- 1 sleeve (50 sheets) fine sandpaper
- 6 rolls scotch electricians tape
- 10 5-gallon cans flat black topside paint
- 10 1-gallon cans wood preservative
- 4 1-gallon cans red lead
- 3 #5 cans white lead
- 1 1-gallon can penetrating oil
- 4 5-gallon cans raw linseed oil

- 1 #5 can of putty
- 1 1-gallon can of hydroseal
- 8 1-gallon cans white outside primer
- 1 #100 can Keystone wire rope lubricant
- 6 5-gallon cans Marine glue (pitch)
- 2 pitch ladles
- 6 rolls caulking cotton
- 3 lbs. caustic soda
- 3 #100 sacks beach sand
- 6 deck scrubbing brushes with handles
- 3 cotton mops
- 1 Burns pressure burning torch
- 5 lbs. each #6, 8 and 10 common galvanized nails
- 5 lbs. each #4, 6 and 8 galvanized finishing nails

It is anticipated that if a Maintenance and Restoration Foreman is aboard the THAYER before the end of February that it will take him the better part of a month to initiate the maintenance program outlined above, lay in an adequate supply of tools and stores, and to determine, with the assistance of the San Francisco Maritime Museum, the timetable for the restoration job. His energies cannot be devoted to the THAYER alone, for the restoration of the WAPAMA is a more extensive and complex job. The assistance of a Shipwright Foreman must be procured as soon as possible -- preferably before the first week in March. Before extensive restoration can actually begin on both the THAYER and the WAPAMA a Machinery Maintenance and Restoration Foreman, two additional shipwrights, and three or more laborers or helpers must be hired. Although it is possible that a certain amount of contract work might be initiated at an early date (such as removal of reefers and 'tween decks in the WAPAMA), it seems unlikely that the State's own employees will be able to swing into full-scale operations much before April.

(A description of the positions mentioned above and an analysis of the problems involved in locating more permanent berths for the vessels appear under separate titles in this Report.)

The areas which will involve the most concentrated restoration aboard the C. A. THAYER are the cabin and the deckhouse. The condition of the cabin is comparatively close to "original," but for this very reason it has suffered considerable deterioration. Also, some changes have been made in past years in the interior layout, and the cabin should be restored to its original plan.

The deckhouse is in comparatively good shape, but only because it was quite recently constructed. It is much larger than the original house and does not "make sense" on a restored lumber schooner.

The Maritime Museum is presently attempting to determine the original layouts of both the cabin and deckhouse and will present a plan for their restoration in a subsequent Report.

The third "living space" aboard the THAYER -- the codfishermen's forecastle -- was not an original part of the vessel, but we think it is best to let it remain as an area dedicated to the years the schooner spent on the Bering Sea cod banks. Its removal would add little to the spacious sweep of the hold, and it is a part of the ship which the visitor will find interesting.

The extensive structural restoration carried out in Seattle has relieved the current program of the burden of major repairs to the hull. However, rotten spots (particularly in the decks) may involve more work than appearances would indicate.

PERSONNEL FOR THE RESTORATION OF THE C. A. THAYER

As has been pointed out above, the State of California does not at present have employed in the C. A. THAYER restoration project any persons capable of conducting an entirely satisfactory maintenance program, much less an extensive restoration program. Obviously a number of competent men must be hired in various capacities, and some of the specialists hired in the very near future for the restoration work are going to be needed, as permanent State employees, after the initial restoration period is over in order that maintenance and remaining restoration work be carried out effectively.

An analysis of the personnel problem might best begin with a consideration of the sort of employees that will be necessary, say, eighteen months from now when the ships are open to the public, and the major portion of the restoration work has been completed, for it is clearly in the interest of the State to have its long-term goals in view during the period when the ships are still staffed with "temporary" employees. Further, it is necessary to consider the scope of the whole project, rather than the requirements of the C. A. THAYER alone, since the more highly-paid members of the staff will undoubtedly divide their energies among all of the vessels in the project, each man practicing his own specialty.

The schooner C. A. THAYER and the steam schooner WAPAMA are already under State ownership, and the ferryboat EUREKA will join them soon; in addition, it is contemplated that three smaller vessels will become part of the display: Amundsen's cutter GJOA, a scow schooner (quite probably the ALMA), and the junk FREE CHINA. These vessels represent over 4,000 tons of wooden shipping, and hundreds of tons of machinery. Men with the experience to handle the key jobs in this program are scarce, and cannot be found within the present Beaches and Parks organization nor on the present State Civil Service lists.

With these considerations in mind, the Maritime Museum recommends as the minimum goal for the fall of 1959 that the following Civil Service positions be created by that time:

1. Historic Ships Maintenance and Restoration Manager.

This is the man who will supervise all work aboard all of the vessels, will establish standards, specifications and pace of work, and will be charged with "operational responsibility".

2. Shipwright Foreman

The Shipwright Foreman will be in charge of all carpenter work, and will be responsible to the Manager.

3. Machinery Maintenance and Restoration Specialist

This man will be responsible for all machinery, water lines, plumbing, etc., and will handle most metal-work of any kind done aboard the vessels by State employees. He will be responsible to the Manager.

These three key positions will be as necessary in the successful

operation of the vessels after they are on display as they are during the next year's restoration work. Yet they do not represent an adequate permanent technical staff: a Shipwright, to assist the Shipwright Foreman, and a Bosun or Rigger, to work directly under the Manager, will most probably prove necessary. In addition, a number of willing, but not necessarily skilled, workers will be needed to assist the technical staff.

The personnel requirement for the coming year's restoration activity, aboard the C. A. THAYER and WAPAMA, dovetail very well with the permanent requirements. The Manager, Shipwright Foreman and Machinery Specialist are the key men in this phase as well, and they may be hired under contract or as temporary employees during the period it takes to establish permanent Civil Service positions. The Maritime Museum Association feels that it is most important to the restoration project that action be taken to establish permanent positions of Manager, Shipwright Foreman, and Machinery Specialist immediately after the hiring of these key men on a temporary basis, that they may feel assured that they will have every opportunity to establish themselves in career positions at an early date.

The restoration phase of the program will also require the hiring of at least two additional Shipwrights and at least four other workers. These four "other workers" (the term "laborers" might be cautiously employed) should be reasonably enthusiastic young men who do not

necessarily possess any well-developed craftsmen skills, and whose duties it will be to assist the skilled personnel as the Manager sees fit. It would seem that some rating which pays about \$350. per month would be desirable for this category, although it might be possible to piece together an adequate force in the Park Aide rating.

It must be borne in mind that the above recommendations, both in the case of the immediate program for the restoration of the THAYER and WAPAMA, and the future program for the maintenance and display of these vessels together with the EUREKA and the small craft, do not necessarily reflect the size of the force that will be needed; rather, these are the positions which are essential preconditions to the progress of the programs. When the suggested restoration force is employed, work of all essential types will go ahead. Whether or not this force will prove sufficient depends upon the amount of work that can be let to contractors, the rate at which it is desired that the work progress, the quality of the men employed, and the extent to which presently unforeseeable difficulties develop.

To summarize, then, the obvious and minimum personnel requirements at the "professional" level for both phases of the ship project are as follows:

Restoration of C. A. THAYER and WAPAMA, Feb. 1959 - Spring 1960

1. Historic Ships Maintenance and Restoration Manager
2. Shipwright Foreman
3. Shipwright (or Leading Shipwright)
4. Shipwright
5. Machinery Maintenance and Restoration Specialist

Maintenance of C. A. THAYER, WAPAMA, EUREKA, and small craft
Spring - 1960

1. Historic Ships Maintenance and Restoration Manager
- * 2. Bosun (or Rigger, as circumstances dictate)
3. Shipwright Foreman
- * 4. Shipwright
5. Machinery Maintenance and Restoration Specialist.

* There is no need to initiate action to establish the positions of Bosun and Shipwright within the near future.

REPORT ON MOORING FACILITIES FOR THE SCHOONERS C. A. THAYER AND WAPAMA

Since the arrival of the C. A. THAYER and WAPAMA in San Francisco Bay, the Old Ships Project has been plagued by the problems of locating adequate berthing space for the vessels. The problem becomes even more acute with the development of the large-scale restoration program, for berths that were adequate for the storage and maintenance of the ships are most frequently not suitable to the prosecution of heavy work.

Phase I:

The first attempt to secure a berth in the Bay Area was made by the San Francisco Maritime Museum before the arrival of the C. A. THAYER in October, 1957, when the Bethlehem Shipbuilding Corporation agreed to furnish space at their San Francisco shipyard, free of charge, with the condition that the State provide adequate insurance protection and agree to hold Bethlehem harmless in the event of any claim arising from the State of California's operation. These conditions were unacceptable to the State, and the decision to moor the C. A. THAYER at Hospital Cove, Angel Island, alongside a pier operated by the Division of Beaches and Parks, obviated any further discussions with Bethlehem.

The Division of Beaches and Parks subsequently obtained from the Port of Oakland a vastly more protected berth at Jack London Square, in Oakland, at a nominal rental. The Port, with a view to the laid-up condi-

tion of the vessel and the value of the schooner as a public display, did not demand absolution from liability.

The Jack London Square space acquired considerable commercial value, however, when an excursion-boat owner became desirous of renting the berth in the summer of 1958, and, under pressure from the Port of Oakland, the C. A. THAYER was swung around to the Webster Street Pier at Jack London Square. This pier had been condemned by the State in anticipation of the construction of the new tube to Alameda, and while the THAYER still lies there, it would appear at the moment that she must be moved before May, 1959.

At the end of August, 1958, when the THAYER was moved to the Webster Street pier, negotiations were entered into with the Toll Bridge Authority to store the schooner at Castro Point, Richmond. No difficulties were encountered in dealing with the Toll Bridge Authority for a free berth, but the likelihood, in September, of the release of sufficient funds to commence extensive restoration in the near future changed the nature of the mooring problem completely, and the arrival of the WAPAMA, in October 1958, intensified the necessity of locating comparatively high class facilities.

Phase II: - Berthing facilities for the Restoration Period,
February, 1959 - Spring, 1960.

The suggested criteria in selecting berths for the C. A. THAYER and WAPAMA during the restoration period are as follows:

1. The vessels must be moored alongside wharves which provide access for trucks, permit easy loading and unloading of heavy

materials and, preferably, will support equipment as heavy as a mobile crane.

2. It is desirable that the vessels be moored in a location convenient to the center of ship-repair activity as most potential restoration personnel will be found in or near San Francisco or Oakland, and as all of the shipyard work will probably be done in yards along the Oakland Estuary. Thus, Oakland or Alameda would be the best locations, while Richmond or Sausalito would be at the outer limits as far as convenience is concerned.
3. It would be most desirable to moor the vessels together, or at least close enough to each other that work can be easily coordinated, and workmen and supplies shifted from one vessel to the other as needed and without undue loss of time.

To this date it has proved impossible to find berths meeting the specifications outlined above under terms which are acceptable to both the owners of suitable piers and to the State of California.

Negotiations were opened at the end of October, 1958, with the U. S. Maritime Administration for the use of the finger pier at the Alameda Reserve Shipyard. This pier meets all of the requirements for the berthing of the vessels with two exceptions: the weakened deck of the pier would make the use of really heavy equipment difficult, although not

impossible; the security regulations of the yard would undoubtedly prove burdensome.

The cooperative attitude of the Maritime Administration officials would prove invaluable in overcoming any problems which might arise out of the berthing of the vessels at the Alameda Shipyard. However, it seems impossible to enter into an agreement with the Maritime Administration unless the State of California will accept complete responsibility for any and all claims which might arise from the State's use of the facilities. This is the same condition demanded by Bethlehem over a year ago; it is the same condition that will be demanded by any owner who is offering free berth space.

The only way in which the State can avoid the necessity of accepting liability is to moor the vessels in commercial berths, in which case the owner of the facilities can purchase adequate insurance with part of his rental fee. The Oakland Dock & Warehouse Company, which owns Pier 1, E, Middle Harbor Road, where the WAPAMA has been moored since October, offers such an arrangement at a reasonable price. The pier, while dilapidated, is entirely adequate for the intended service, and could accommodate both vessels. Everything considered, the facility is superior to the Maritime Administration pier for the mooring of the vessels during the restoration program. From the physical standpoint, the Maritime Museum recommends this location above any other that has so far been considered.

However, the State has refused to pay for berths so long as adequate facilities might be found for which there is no charge. The reservation by the State of the right to moor its vessels free of charge at any piers constructed upon numerous parcels of tide lands granted by the State to several Bay Area municipalities would seem to offer hope of the acquisition of desirable berths at no cost.

The Port of Oakland, which owns many piers built upon tidelands grants, has been approached on this matter. Mr. Wagner, Director of Properties of the Port, informed the Maritime Museum on January 16, 1959, that the Port cannot make any suitable space available, nor is the Port able to offer adequate alternative facilities which are not built upon tidelands grants. The Port of Oakland, then, will not give up highly valuable pier space to the State for the term of a year or more without a fight.

The Maritime Museum questions the advisability of forcing the Port of Oakland (or any other port) to provide berth space by legal means, inasmuch as the cooperation of the owner of the facilities where the restoration work is to be carried out will prove a valuable asset to the program; the active resistance of the owner would very quickly cost the State far more than the price of a commercial berth. If the State's actions should prove so distasteful to the owners as to instill any desire for revenge, the means would be at hand:

1. Access to the facilities might be limited by obnoxious regulation..

2. Work can be hampered by enthusiastic and literal enforcement of fire and other safety regulations.

3. The use of heavy equipment can easily be limited.

And the additional factors must be considered before starting legal action:

1. The occupation of cargo-handling facilities renting for from ten to twenty times as much as the type of space required by the program is opposed to reason -- and may be opposed to the intent of the tidelands grants, which were made "for the promotion of commerce and navigation."

2. Can the municipality demand a "hold harmless" agreement, for use of the facility, or in connection with access to it?

3. How much will the delaying tactics and rear-guard action which the municipality may be expected to indulge in before the ships are even berthed cost the State?

It will cost about \$4,800 to moor the vessels at the Oakland Dock & Warehouse Company for one year; there is no practical limit to what a really unshakeable determination to procure a "free" berth might cost.

Supplementary Note:

The C. A. THAYER was moved to the Oakland Dock & Warehouse Company on February 4th (subsequent to the compilation of the Report above), and she is now moored directly ahead of the WAPAMA.

A month's experience with this arrangement has not caused us to change any of the views outlined above, but has tended, rather, to confirm our opinion as to the desirability of the Oakland Dock & Warehouse Company location for the restoration.

The moving of the ships together has made it possible to cut the force of four watchmen to two, and to utilize the two spare men as day-workers. Under this arrangement, the Ranger I in charge of the vessels has been able to move ahead with the beginnings of an adequate maintenance program. The groundwork for the restoration program is being laid, with the cleaning of the WAPAMA's engine-room, gathering of tools, and drawing up of material requirements.

PART II

SALT SALMON PACKET: THE C. A. THAYER AND "WHITEHEAD PETE" -- 1912 - 1924

Birth of the Salmon Industry

Development of Bristol Bay . .
Formation of the Alaska Packers

Bristol Bay in Peter Nelson's Time. .
Fisheries and Fishermen
Canning and Salting

Peter Nelson's Salteries and the
C. A. THAYER

Bibliography

Appendices:

- I. Notes on Salmon
- II. Statistical History of the
C. A. THAYER
- III. Method of Pickling Salmon

PETER M. NELSON

"Whitehead Pete" Shows Off His New Launch . .

Peter Nelson (center) took some friends for an outing on April 12, 1912, aboard his new power boat. The launch, RUDOLPH N., named for his son, towed the C.A. THAYER to sea, and then carried this excursion party around San Francisco Bay, before departing herself for Alaska under Peter Nelson's command.

The man in the cap on Nelson's left is William P. Carl, whose cooperage firm supplied the Nelson salteries with barrels. Mr. Carl's secretary dedicated a poem upon the occasion, concluding:

"We thank Mr. Nelson for the day,
And wish him a delightful trip while away.
Fare thee well RUDOLPH N, au revoir:
Tuesday thou sails't for the Northern shore,
To return to San Francisco nevermore.
Fare thee well RUDOLPH N., au revoir. "



SALT SALMON PACKET: THE C. A. THAYER
AND 'WHITEHEAD PETE' -- 1912 - 1924

INTRODUCTORY NOTE . . .

One of the most important maritime industries of the West Coast developed during the 1880's, with the opening of the great Alaskan salmon fisheries -- destined to become the most valuable fisheries in the world. The sailing vessel played a dominant role in this industry, and the three-masted schooner C. A. THAYER was only one of the scores of ships which spent a portion of their lives making the annual run to the Alaska fishing grounds.

The very nature of the Alaska salmon industry determined the employment of large, deep-water cargo vessels in the trade, for transportation figured much more largely in the Alaskan fisheries than in most of the other fisheries of the world. The salmon streams of Central Alaska and the Bering Sea were 2,000 miles from San Francisco, the base of operations; the supply of local labor was limited to a handful of lazy and undependable natives; and vast amounts of materials and supplies had to be transported to the canneries and salteries each spring and the product of the industry returned each fall.

Between 1880 and 1925 much the most economical means of supporting the Alaskan operation was the use of sailing vessels. Since ships